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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HAWKINS, CHERYL N

ART UNIT PAPER NUMBER

1734

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/924,972	Applicant(s) BISAZZA ET AL.	
	Examiner Cheryl N Hawkins	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-27 is/are pending in the application.
- 4a) Of the above claim(s) 15-23, 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-14, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|--|--|

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 24 recites a device which includes "at least one panel having a plurality of mosaic tesserae and a transparent supporting sheet on a visible face of the mosaic tesserae, the mosaic tesserae being arranged in a geometric fashion". It is unclear as to whether that limitation refers to a structural or functional portion of the claimed device or whether it refers to the product which results from the intended use of the claimed device. For the purposes of examination, it will be assumed that the panel having a plurality of mosaic tesserae and a transparent supporting sheet on a visible face of the mosaic tesserae is the product which results from intended use of the device recited in Claim 24 rather than a structural or functional portion of the device itself.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-4, 6, 7, 10, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hottendorf (US 3,654,038) in view of Morel et al. (US 4,783,054). As to Claims 1 and 24, Hottendorf discloses an apparatus which applies a sheet material (Figure 3, tape segment 106) on a visible face of an advancing article (Figure 3, container 16) which includes feeding means having a reel member (Figure 3, axle 24, feed wheels 34 and 36) configured to store and continuously dispense the sheet material; and application means for applying the sheet material over the article, the application means including cutting means (Figure 3, cut-off knife 102, cut-off anvil 104) configured to cut the sheet into a segment of variable sizes corresponding to the article (column 3, lines 3-8) and suction drum rotating means (Figure 3, wheel 82) to retain on an outer cylindrical surface thereof the segment of sheet material and to release the segment onto the article, the suction drum rotating means retaining the sheet segment by a suction force and releasing the segment of sheet onto the article by temporarily ceasing the suction force (Figure 3, baffle 107; column 2, lines 57-61), wherein the suction drum rotating means includes a hollow drum equipped inside with means to create a depression (Figure 1, fan 85; Figure 4, suction pipe 86; column 2, lines 32-37); a plurality of holes (Figure 4, holes 84) disposed circumferentially and axially to substantially cover the drum surface to produce the suction force to accommodate the variably-sized sheet segment; and means to block the suction force (Figure 3, baffle 107) at least for a section of the drum surface facing the conveyor belt, and for an amplitude to substantially cover the article.

As to Claims 1 and 24, Hottendorf does not disclose a clamping means for blocking the suction force for at least a portion of the drum. It is well known and conventional in the apparatus art, as disclosed by Morel et al. (column 3, lines 32-35), to employ clamping means to

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block the passage of pressurized air. It would have been readily apparent to one of ordinary skill in the art at the time of the invention that baffle means and clamping means are functionally equivalent for blocking the passage of pressurized air. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Hottendorf to include clamping means as suggested by Morel et al. for blocking the suction force of the rotating drum.

As to Claim 2, the references as combined (see Hottendorf) disclose an apparatus in which the cutting means (Figure 3, knife 102, anvil 104) are able to act on the sheet (Figure 3, tape 22) when it is held on the outer surface of the suction drum means (Figure 3, wheel 82).

As to Claims 3 and 25, the references as combined (see Hottendorf) disclose an apparatus in which the sheet has a face equipped with gluing means and is able to wind on the suction drum means with its face without gluing means and for an angle such as to invert the direction of feed and present its face equipped with gluing means facing towards the article (Figure 3, pre-gummed tape 22).

As to Claim 4, the references as combined (see Hottendorf) disclose an apparatus which includes a pressure roller (Figure 3, rollers 109; column 2, lines 62-65) arranged downstream of the suction drum means, the pressure roller being able to press the sheet segment against the surface of the article to achieve stable attachment thereof.

As to Claim 6, the references as combined (see Hottendorf) disclose an apparatus wherein the suction drum means (Figure 3, wheel 82) includes means able to interrupt the suction (Figure 3, baffle 107) when the sheet segment (Figure 3, tape segment 106) is released in correspondence with the article (Figure 3, container 16).

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As to Claim 7, the references as combined (see Hottendorf) disclose an apparatus wherein the means for interrupting the suction comprise mechanical means (Figure 3, baffle 107) arranged inside the hollow drum (Figure 3, wheel 82) for a zone correlated to the size of the article.

As to Claim 10, the references as combined (see Hottendorf) disclose an apparatus in which the sheet material (Figure 3, tape segment 106) is applied on the visible face of the article (Figure 3, container 16).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hottendorf (US 3,654,038) and Morel et al. (US 4,783,054) as applied to claim 3 above, and further in view of Talalay (US 4,504,336) and Du Fresne (US 2,931,751). The references as combined (see Hottendorf) disclose an apparatus comprising means for delivering water (Figure 3, water wheel 28) against the face of the sheet material to reactivate the glue on the sheet material (Figure 3, tape 22), but does not disclose means for delivering steam or nebulized water in cooperation with the face of the article to reactivate glue on the sheet. Talalay discloses a tab applying apparatus which includes an adhesive activating means such as a hot water spray or a steam jet (column 14, lines 41-45). Du Fresne discloses a method for sealing a sheet material onto the surface of a tile which includes spray means for applying a bonding agent (Figure 2, sprayers 21). It would have been readily apparent to one of ordinary skill at the time of the invention that the water wheel disclosed by Hottendorf and the steam/water spraying device disclosed by Talalay are functionally equivalent for reactivating moisture-activated adhesives. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of

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the references as combined to include means for delivering a steam or nebulized water jet against the surface of the article as suggested by Talalay and Du Fresne to reactivate the glue on the sheet material to effect bonding.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hottendorf (US 3,654,038) and Morel et al. (US 4,783,054) as applied to claim 1 above, and further in view of Lindstrom et al. (US 4,32,103). The references as combined do not disclose an apparatus which includes alternate lifting and lowering means for the suction drum. Lindstrom et al. discloses a labeling apparatus which includes means for alternately lifting and lowering the label applying roller in synchronism with the passage of articles thereunder (column 5, lines 35-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the suction drum means of the references as combined to be equipped with means for alternately lifting and lowering the drum as suggested by Lindstrom et al. to allow for application of the cut sheet segments to be synchronized with the passage of articles underneath the suction drum.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hottendorf (US 3,654,038) and Morel et al. (US 4,783,054) as applied to claim 3 above, and further in view of Heuser et al. (US 3,698,296) and Hoover (US 2,325,400). The references as combined do not disclose the sheet material as having two layers and a winding roller for detaching the second layer from the first layer which contains the adhesive. It is well known and conventional in the tape dispenser art, as disclosed by Hoover (Figure 1, tape T, liner L, supply drum 13, take-up roll 14), to provide pressure-sensitive adhesive tape with a backing strip to protect the adhesive layer

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until the time of application and to provide the tape dispensing apparatus with a take-up roller to remove the backing strip prior to the application of the tape. It is well known and conventional in the adhesive bonding apparatus art, as disclosed by Heuser et al. (column 8, lines 59-66), that pressure-sensitive adhesives and water-activated adhesives are functionally equivalent for bonding a sheet material onto a given substrate. It would have been readily apparent to one of ordinary skill in the art at the time of the invention to modify the apparatus of the references as combined to be capable of applying different kinds of tape, such as a pressure-sensitive adhesive tape. When utilizing the apparatus of the references as combined to apply sheet segments containing pressure-sensitive adhesive, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the references as combined to provide the tape with a backing strip as suggested by Hoover to protect the adhesive layer until the time of application and to provide the tape dispenser with a take-up roller as suggested by Hoover to remove the backing strip prior to the application of the tape.

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hottendorf (US 3,654,038) and Morel et al. (US 4,783,054) as applied to claim 1 above, and further in view of Miyajima et al. (US 6,321,813), Farfaglia et al. (US 3,847,540), Sbrana (US 5,972,151), and Heuser et al. (US 3,698,296). The references as combined do not disclose means for heating the article prior to applying the sheet segment. It is well known and conventional in the bonding apparatus art, as disclosed by Miyajima et al. (column 3, lines 27-29; column 4, lines 33-37), Farfaglia et al. (Figure 3), Sbrana (Figure 2), to heat a substrate with either a flow of hot air or a radiating heating device to facilitate bonding. It is well known and conventional in the adhesive

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bonding apparatus art, as disclosed by Heuser et al. (column 8, lines 59-66), that thermally activated adhesives and water-activated adhesives are functionally equivalent for bonding a sheet material onto a given substrate. It would have been readily apparent to one of ordinary skill in the art at the time of the invention to modify the apparatus of the references as combined to be capable of applying different kinds of tape, such as tape material containing thermally activated adhesive. When utilizing the apparatus of the references as combined to apply sheet segments containing thermally-activated glue, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the references as combined to include means for heating the article prior to applying the sheet as suggested by Miyajima et al., Farfaglia et al., and Sbrana to reactivate the glue on the sheet thereby effecting bonding.

Response to Arguments

9. In response to the applicant's statement that the examiner has mistakenly listed the wrong claims as being withdrawn from consideration in the office action summary, the examiner agrees and notes that the newly submitted office action summary correctly lists the withdrawn claims as being 15-23, 26, and 27.

In response to the applicant's arguments regarding the restriction requirement, the examiner maintains that the restriction requirement is proper and final as noted in the last office.

In response to the applicant's amendment to Claim 24, the objections to Claims 24 and 25 have been withdrawn.

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The newly provided reference of Hottendorf discloses an

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apparatus which applies a sheet material on a visible face of an advancing article which includes feeding means having a reel member configured to store and continuously dispense the sheet material; and application means for applying the sheet material over the article, the application means including cutting means configured to cut the sheet into a segment of variable sizes corresponding to the article and suction drum rotating means to retain on an outer cylindrical surface thereof the segment of sheet material and to release the segment onto the article, the suction drum rotating means retaining the sheet segment by a suction force and releasing the segment of sheet onto the article by temporarily ceasing the suction force, wherein the suction drum rotating means includes a hollow drum equipped inside with means to create a depression; a plurality of holes disposed circumferentially and axially to substantially cover the drum surface to produce the suction force to accommodate the variably-sized sheet segment; and means to block the suction force at least for a section of the drum surface facing the conveyor belt, and for an amplitude to substantially cover the article. The reference of Hottendorf does not disclose a clamping means for blocking the suction force for at least a portion of the drum. It is well known and conventional in the apparatus art, as disclosed by Morel et al., to employ clamping means to block the passage of pressurized air. It would have been readily apparent to one of ordinary skill in the art at the time of the invention that baffle means and clamping means are functionally equivalent for blocking the passage of pressurized air. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Hottendorf to include clamping means as suggested by Morel et al. for blocking the suction force of the rotating drum.

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Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl N Hawkins whose telephone number is (571) 272-1229. The examiner can normally be reached on 8:30am-5:00pm.

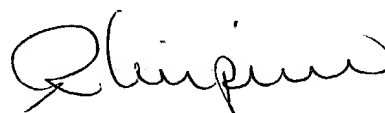
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (517) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheryl N. Hawkins 4/5/04

Cheryl N. Hawkins
March 30, 2004



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